

## XRD Mineralogy and SEM/EDS Mineral Coating Work

## **Description**

Sandia National Laboratories evaluated the mineralogy and grain coatings of sediment samples from the Housatonic River. This was done by using an X-Ray Diffractometer (XRD) for mineralogical measurements and a Scanning Electron Microscope (SEM) with an Energy Dispersive System (EDS) to visually identify coatings and their elements.

## **Purpose**

Quantitative analysis of mineral properties and associated surface coatings are necessary to determine both physical and chemical transport of contaminants in the Housatonic River sediments.



Quartz Grain with Organic Coating

## **Contacts**

Richard Jepsen Carlsbad Programs Group 4100 National Parks Highway Carlsbad, NM 88220 Phone: (505) 284-2767

Fax: (505) 234-0061 Email: rajepse@sandia.gov Jesse Roberts Carlsbad Programs Group 4100 National Parks Highway Carlsbad, NM 88220 Phone: (505) 284-2710

Fax: (505) 234-2710 Fax: (505) 234-0061 Email: jdrober@sandia.gov





<sup>\*</sup>Research supported by the U.S. Environmental Protection Agency, Region 1, and the U.S. Army Corps of Engineers, New England District